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The Impact of Poverty in Parents and Caregivers' Participation towards Community Child Wellbeing Activities among the Pastoral Communities of Baringo, Marsabit, Turkana and West Pokot in Kenya

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Authors' contributions

This work was carried out in collaboration among all authors. Author WO developed the structure of the paper, titling and theoretical framework and overall quality control. Author LO performed data analysis and interpretation. Author SO collected field data and drafted the paper. Authors FK, PT, PW and JG collected field data. All authors read and approved the final manuscript.

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ABSTRACT

Participation and involvement of parents and caregivers in community child wellbeing activities influences the achievement and cognitive development of children, youth, and even young adults (Melhuish et al., 2008; Sylva et al., 1999) [1]. The purpose of this paper is to assess the impact of poverty in parents and caregivers' participation towards community child well-being activities among the pastoral communities of Baringo, Marsabit, Turkana and West Pokot Counties in Kenya. It uses the Multidimensional Poverty Index (MPI) and Poverty Probability Index (PPI) for classification of households as either rich or poor. Households with MPI score ≥ 0.33 or PPI ≥0.5 were classified as poor, otherwise rich. The data for this study were taken from both primary and secondary sources.

The study results showed that overall, nine in ten of the sampled households were poor while one in ten were rich. Among the households classified as rich, six in ten (62.7%) compared to five in ten (53.8%) of those classified as poor participated in child wellbeing activities.

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Based on the study findings and Pearson Chi-Square test results, the study concluded that there was a significant relationship between poverty and participation of caregivers in community child wellbeing activities. The relationship reflected that caregivers from poor households had a higher risk of not participating in child wellbeing activities than those from rich households. The study recommended the need for accelerating interventions aimed at poverty alleviation. Such interventions may include but not limited to: increasing access to education, supporting poor households through cash transfer programmes, adoption of disaster risk reduction strategies in pastoral economies and women economic empowerment.

Keywords: Caregivers; child wellbeing; participation; pastoral communities; poverty.

1. INTRODUCTION

This paper analyses the impact of poverty in parents and caregivers' participation towards community child well-being.

The word caregiver as used in this paper denotes a person or people including parents, who look after infants and young children. The care that children receive has significant effects on their survival, growth and development. Care refers to the behaviours and practices of caregivers (mothers, siblings, fathers and child care providers) to provide food, health care, stimulation and emotional support necessary for child health, growth and development. Not only the practices themselves, but also the way they are performed, in terms of affection and responsiveness to the child are critical to a child's survival, growth and development [2].

Participation is interpreted variously by different people in different settings. This is basically because the concept has been defined differently by different scholars and organisations. According to the World Bank cited by Mubita A et al. [3] participation is defined as a process through which stakeholders' influence and share control over development initiatives, decisions and resources which affect them. On the other hand, IIED (1994) [3] defines participation as empowering people to mobilize their own capacities, be social actors, rather than passive subjects, manage the resources, make decisions, and control the activities that affect their lives. Brett (2003) [3] defines participation as "an educational and empowering process in which people, in partnership with each other and those able to assist them, identify problems and needs, mobilize resources and assume responsibility themselves to plan, manage, control and assess the individual and collective actions that they themselves decide upon.

The United Nations Convention on the Rights of the Child affirms that "children should grow up in an atmosphere of happiness, love and understanding" [4-6]. A child's well-being is considered as an integrated whole, encompassing multiple domains or spheres of life including cognitive and academic development; socio-emotional or psychological development; social behaviours; physical health and safety; and relationships [7,8]. Supportive, close, and positive relationships by parents or caregivers and the entire community are critically important for all children, particularly those who are or have been at risk of maltreatment [9]. Caregivers, often the parents, play a central role in provision of home health care. However, the process of caregiving can be daunting, and caregivers experience a significant impact on their psychological well-being. Fatigue, poor physical health, and social isolation are also common [10-13].

Poverty is a state of deprivation, in terms of both economic and social indicators, such as income, education, and health care, access to food, social status, self-esteem and self-actualization [14]. Deprivations can also be categorized thematically into lack of resources, opportunities and choices, power and voice, and human security. Kenya has seen an upswing in its economic growth and an improvement in living standards following the turn of the century [15]. Poverty in Kenya dropped since 2005/06 to rest at 36.1% in 2015/16, according to national estimates of the poverty headcount rate, representing a decline of 0.2 million people in poverty. Similarly, the Kenya Integrated Household and Budget Survey 2015/2016, indicates that poverty rates remain considerably higher in rural areas (40%) compared to peri-urban or core urban areas (28-29%). These differences mask regional variations, with areas of the North East Turkana for example reaching poverty rates close to 80% [16]. Disaggregating the multidimensional poverty index along its

dimensions and indicators reflected that Kenyans are most often deprived in terms of their household living conditions, such as sources of cooking energy, residential dwelling floor material, sources of drinking water, access to sanitation, and access to electricity, and relatively less so in terms of schooling which are worse for households in rural areas [15]. This study used both the Multidimensional Poverty Index (MPI) [16] and the Poverty Probability Index (PPI) [17] to measure household poverty in the case study counties of Baringo, Marsabit, Turkana and West Pokot.

Pastoralism is a way of life based primarily on raising livestock, particularly small ruminants, cattle and camels. Pastoral livestock production systems are mostly found in Africa's vast Arid and Semiarid Lands (ASALs) [18,19]. These areas are characterized by marked rainfall variability, and associated uncertainties in the spatial and temporal distribution of water resources and grazing resources for animals (Department of Rural Economy and Agriculture, October 2010). In Kenya, there are at least eight ethnic groups that are recognized as traditional pastoralists, and include the Borana, Gabra, Maasai, Pokot, Rendille, Samburu, Somali and Turkana, along with various smaller groups. These people inhabit 13 arid and semi-arid counties that cover a large part of Kenya. According to the Kenya Population and Housing Census (2019), there were 8,785,058 "ethnic" pastoralists in the ASAL counties – people who identify themselves as pastoralists but do not necessarily actively manage livestock themselves [20]. This study sampled households from the pastoral communities in the case study counties.

The review of literature showed that no study had been done to investigate the impact of poverty on the participation of parents and caregivers' in community child well-being among the pastoral communities. The main objective of the study, therefore, was to investigate the impact of poverty on the participation of parents and caregivers' in child wellbeing activities in the case study counties.

2. METHODOLOGY

2.1 Study Areas

The study purposively sampled households from wards where World Vision Kenya had programme interventions, due to high social capital and security. These wards were Bartabwa Ward (Baringo County), Kalapata Ward (Turkana County), Golbo Ward (Marsabit County), and Endough Ward (West Pokot County) as shown in Fig. 1. This study was carried out between September 2021 and January 2022.

Baringo County is located in the Rift Valley region of Kenya and boarders Turkana and Samburu Counties to the North, Laikipia County to the East, Nakuru and Kericho to the South, Uasin Gishu to the Southwest, and Elgeyo-Marakwet and West Pokot to the West. The County is divided into 6 Sub-counties and had a population of 666,763 people as at 2019 [21].

Marsabit County is located in the Northern region of Kenya. It shares an international boundary with Ethiopia to the North, borders Turkana County to the West, Samburu County to the South and Wajir and Isiolo Counties to the East. Administratively, Marsabit County is divided into four sub-counties. As at 2019, Marsabit County had a population of 459,785 people [21].

Turkana County is located in the Northwestern region of Kenya and borders Uganda to the West, South Sudan and Ethiopia to the North and North-East respectively. Internally, it borders West Pokot and Baringo Counties to the South, Samburu County to the South-East, and Marsabit County to the East. The county is administratively divided into seven sub counties, 30 wards and 156 sub-locations and had a population of 926,976 people as at 2019 [21].

West Pokot County is located in the North Rift region of Kenya. It borders Turkana County to the North and North East, Trans Nzoia County to the South, Elgeyo Marakwet County and Baringo County to the South East and East respectively. The County has four constituencies, 20 wards, 16 divisions, 65 locations and 224 sub locations. As at 2019, the County had a population of 621,241 people [21].

2.2 Methods

This study adopted a descriptive survey design utilising quantitative and qualitative data. Primary data was collected through the caregiver/ household questionnaire. The questionnaire collected information on demographic characteristics, perception of parents or caregivers on participation in child wellbeing activities as well as parameters for measuring PPI and MPI. Secondary data was obtained through review of relevant literature referenced in this paper.

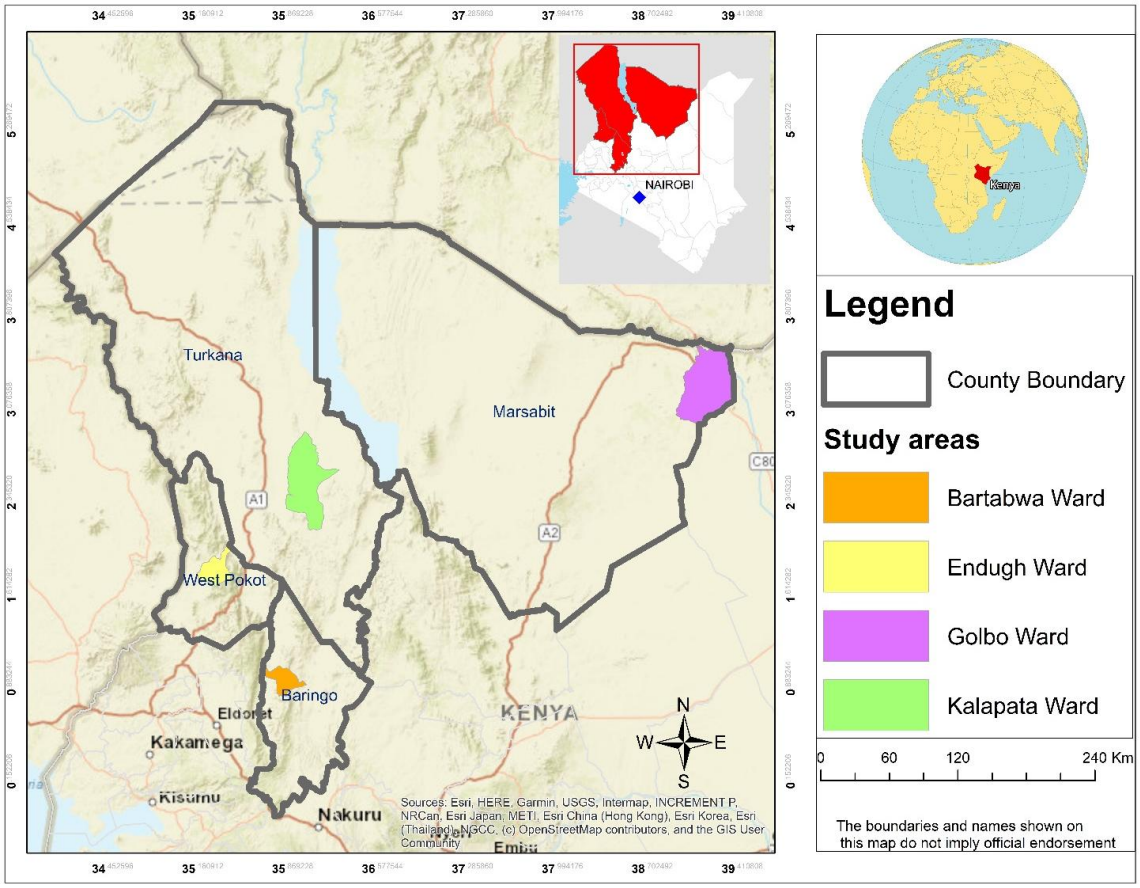

Fig. 1. Case study Counties And area map

The determination of the sample size for the parent/caregiver survey was done using the World Vision Kenya Learning through Evaluation, Accountability and Planning (LEAP) 3 sample size calculator based on Confidence Interval (CI) of 95%, statistical power of 80%, and design effect of 2 and non-response of 10%. Based on this, a minimum sample size of 900 households was adopted for each of the case study counties. The study used two-stage cluster sampling method based on the Probability Proportion to Size (PPS) sampling procedure. The first stage involved identification of the cluster unit, which was the village. All the villages were listed in the study wards, then 30 villagers (clusters) were selected based on PPS. The second stage involved selection of 30 parent/caregiver respondents from each cluster using the Expanded Program on Immunization (EPI) method. Based on this sampling criteria, the study sampled a total of 3600 households from the case study counties.

The study used the services of trained research assistants to administer the household/ caregiver questionnaire. Completed questionnaires were relayed through Kobo Collect architecture. The data collection process was undertaken in strict compliance with the Government of Kenya COVID-19 containment measures.

Data analysis was undertaken using a data analysis plan developed for the study. The analysis involved data cleaning for accuracy and data processing. Data processing was done using various software packages including; Microsoft (MS) Excel and IBM Statistical Package for Social Sciences (SPSS) version 26. MS Excel was used to import Comma Separated Values (CSV) data from the central server before being transferred into the SPSS. All the quantitative data were analysed at a CI of 95% and an alpha level (α) of 0.05. Findings of data analysis are the basis upon which this paper has been produced.

3. RESULTS AND DISCUSSION

3.1 Study Response Rate

The study successfully completed 3,600 parent/caregiver survey forms (Table 1), which

was equivalent to a response rate of 100.0% and was appropriate to guarantee rigorous statistical computation, analyses, and inferences.

3.2 Characteristics of Parents or Caregivers

The characteristics of the respondents are presented based on sex, education attainment and employment status. In terms of sex, 70.3% of the respondents were females and 29.8% were males. The proportion of female respondents was also higher across the study counties as depicted in Table 2. The high proportion of female respondents was linked to the role of caregiving in the African society, which is primarily undertaken by women.

The highest level of education completed by the respondents is presented in Table 3. Overall, 62.3% of the parents/ caregivers never attended school, 25.9% completed primary school education, 8.7% completed secondary school education while 3.2% completed college. A higher proportion of parents or caregivers who never attended school were from Turkana County (94.3%) followed Marsabit County (82.1%), West Pokot County (53.1%) and Baringo County (25.9%).These findings support the 2019 Population and Housing Census that found that 68.7%, 63.4%, 39.6% and 25.8% of the school-going populations from Turkana, Marsabit, West Pokot and Baringo counties respectively never attended school [22].

The employment status of the respondents is provided in Table 4. Overall, 71.0% of the respondents were employed (Baringo, 82.0%; Turkana, 52.3%; Marsabit, 57.6%; West Pokot, 92.2%), while 29.0% were unemployed (Baringo, 18.0%; Turkana, 47.7%; Marsabit, 42.4%; West Pokot, 7.8%). The 2019 KPHC report found that 48.2%, 47.7%, 47.3% and 41.4% of the populations from Baringo, West Pokot, Marsabit and Turkana counties respectively engaged in some form of employment [22].

3.3 Household Poverty

The study measured household poverty using the Multidimensional Poverty Index (MPI) and the Poverty Probability Index (PPI). The MPI was

Table 1. Summary of the targeted and completed parent/caregiver survey forms by case study county

County	Sample Size	Completed forms
Baringo	900	900
Turkana	900	900
Marsabit	900	900
West Pokot	900	900
Total	3600	3600

Table 2. Sex distribution of the respondents by case study county

County	Sex of respondents			
	Male		Female	
	Count (n)	%	Count (n)	%
Baringo	249	27.7	651	72.3
Turkana	238	26.4	662	73.6
Marsabit	182	20.2	718	79.8
West Pokot	402	44.7	498	55.3
Overall	**1071**	**29.8**	**2529**	**70.3**

Table 3. Highest level of education completed by parent/caregiver respondents by county

Highest level of education completed by respondents	County				Overall
	Baringo (%)	Turkana (%)	Marsabit (%)	West Pokot (%)	
No Education	19.7	94.3	82.1	53.1	62.3
Primary School	52.8	3.7	12.1	34.9	25.9
Secondary School	21.4	1.0	4.4	7.8	8.7
College	6.1	1.0	1.3	4.2	3.2

Table 4. Main occupation of the parent/caregiver respondent

County	Employment Status of respondents			
	Employed		Unemployed	
	Count	%	Count	%
Baringo	738	82.0	162	18.0
Turkana	471	52.3	429	47.7
Marsabit	518	57.6	382	42.4
West Pokot	830	92.2	70	7.8
Overall	**2557**	**71.0**	**1043**	**29.0**

used to measure household deprivation across 10 indicators in three equally weighted dimensions of health, education and standard of living. Under the health dimension, the study measured nutrition and child mortality. Under the education dimension, the study measured years of schooling and school attendance. Under the standard of living dimension, the study measured type of cooking fuel, type of sanitation, source of drinking water, electricity connection, material for dwelling house, and household assets [16].

The study used Kenya's 2015 Poverty Probability Index (PPI) tool to calculate the proportion of households that were living below the National Poverty Line. The PPI was constructed based on ten (10) country specific questions, namely: County of residence; highest education level of the female household head or spouse; highest education level of any household member; purchase and consumption of bread, meat, fish and ripe bananas; ownership of towel and thermos flask; and predominant wall and floor materials for the main residential dwelling [17].

Classification of households as either poor or rich was based on MPI and PPI scores. Households with MPI score ≥ 0.33 or PPI score ≥0.5 were classified as poor and otherwise as rich.

The results in Table 5 show that overall, 92.6% (95% CI: 91.7%-93.4 %; n=3332, N=3600) of the households were poor which was higher than the National poverty rate of 36.1% [23]. Turkana County had the highest proportion of poor households at 99.2% (95% CI: 98.6%- 99.8%; n=914, N=921) followed by West Pokot County at 92.9% (95% CI: 91.2%- 94.6%; n=839, N=903), Marsabit County at 89.8% (95% CI: 87.8%- 91.7%; n=838, N=936) and Baringo County at 88.3% (95% CI: 86.2%- 90.4% n=1009, N=1148). The high level of poverty in the case study counties were ascribed to harsh environmental conditions that restricted livelihood options (County Government of Turkana, 2018). The harsh environmental conditions lead to loss of livestock, which is the main source of wealth, through severe drought.

3.4 Parents or Caregivers Participation in Child Wellbeing Activities

The study aimed at assessing whether parents or caregivers were involved in promoting child wellbeing activities. Respondents were asked whether they participated in any activities intended to improve the lives of children in the community over the past year preceding the study date. More than a half (54.4%; 95% CI: 52.8%- 56.0%; n=1959, N=3600) of the sampled parents or caregivers confirmed that they participated in these activities. Participation in community child wellbeing activities was highest in Baringo County (80.2%) followed by Marsabit County (51.2%), Turkana County (48.8%) and West Pokot County (37.4%) as shown in Table 6.

Further, the study assessed the level of participation of caregivers or parents from poor households in child wellbeing activities and found that overall, about six in ten (62.7%) rich households participated in child wellbeing activities compared to about five in ten (53.8%) poor households (Table 7).

3.5 Relationship between Household Poverty and Participation in Community Child Wellbeing Activities

Pearson Chi-Square test results of 7.984 at one degree of freedom and p-value of 0.005 presented in Table 8 shows a statistically significant association between household poverty and participation in community child wellbeing activities. This means that there is a difference in the level of parent or caregivers' participation in community child wellbeing activities among the rich and the poor households. The relationship reflects that parents or caregivers from poor households were at a higher risk of not participating in child wellbeing activities thereby negatively affecting children's development.

Table 5. Proportion of poor households

County	Poor Households			
	Yes		No	
	Count (n)	%	Count (n)	%
Turkana	893	99.2	7	0.8
West Pokot	836	92.9	64	7.1
Marsabit	808	89.8	92	10.2
Baringo	795	88.3	105	11.7
Overall	**3332**	**92.6**	**268**	**7.4**

Table 6. Proportion of parents or caregivers who participated in community child wellbeing activities

County	Participated in community child wellbeing activities			
	Yes		No	
	Count (n)	%	Count (n)	%
Baringo	722	80.2	178	19.8
Marsabit	461	51.2	439	48.8
Turkana	439	48.8	461	51.2
West Pokot	337	37.4	563	62.6
Overall	**1959**	**54.4**	**1641**	**45.6**

Table 7. Parents or caregivers' participation in community child wellbeing activities by household category

Parent or caregiver participated in community child wellbeing activities	Household Category				Overall	
	Poor		Rich			
	Count (n)	%	Count (n)	%	Count (n)	%
Yes	1791	53.8	168	62.7	1959	54.4
No	1541	46.2	100	37.3	1641	45.6
Total	3332	100.0	268	100.0	3600	100.0

Table 8. Chi-Square test results of the association between household poverty and parents or caregivers' participation in community child wellbeing activities

Chi-Square Tests	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.984[a]	1	0.005		
Continuity Correction	7.627	1	0.006		
Likelihood Ratio	8.092	1	0.004		
Fisher's Exact Test				0.005	0.003
Linear-by-Linear Association	7.981	1	0.005		
N of Valid Cases	3600				

3.6 Relationship between Education of the Caregiver and Household Poverty

Household poverty is strongly linked to the level of education attained by the caregiver. Pearson Chi-Square measure of association results of 212.378, at three degrees of freedom and p-value of 0.000 conducted at 95% CI, reflects a statistically significant association between education attainment and household poverty (Table 9). This means that caregivers with low education attainment were more likely to be poor than those with high education attainment, which affected their participation in child wellbeing activities.

3.7 Relationship between Employment of the Caregiver and Household Poverty

Pearson Chi-Square measure of association results of 1.145, at one degree of freedom and p-value of 0.285 conducted at 95% CI as presented in Table 10, shows that the association between employment of the caregiver and household poverty is not statistically significant.

Table 9. Chi-Square test results of the association between education of the caregiver and household poverty

Chi-Square Tests	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	212.378[a]	3	0.000
Likelihood Ratio	200.617	3	0.000
Linear-by-Linear Association	157.610	1	0.000
N of Valid Cases	3600		

Table 10. Chi-Square test results of the association between employment of the caregiver and household poverty

Chi-Square Tests	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.145[a]	1	0.285		
Continuity Correction	1.000	1	0.317		
Likelihood Ratio	1.167	1	0.280		
Fisher's Exact Test				0.295	0.159
Linear-by-Linear Association	1.145	1	0.285		
N of Valid Cases	3600				

4. CONCLUSIONS

The study measured household poverty using the Multidimensional Poverty Index (MPI) and Poverty Probability Index (PPI) to classify the households as either rich or poor. Households with MPI score ≥ 0.3 or PPI ≥0.5 were classified as poor, otherwise rich. Accordingly, the study found that about nine in ten sampled households were poor. Across the counties, Turkana County (99.2%) had the highest proportion of poor households followed by West Pokot County (92.9%), Marsabit County (89.8%) and Baringo County (88.3%).

The study further found that overall, more than a half of the sampled respondents participated in community child wellbeing activities. Participation in community child wellbeing activities was highest in Baringo County (80.2%) and lowest West Pokot County (37.4%). Moreover, the study assessed the level of participation of caregivers or parents from poor households in child wellbeing activities and found that overall, across the four counties about six in ten (62.7%) rich households participated in child wellbeing activities compared to about five in ten (53.8%) poor households.

Based on the study findings and Pearson Chi-Square test results, the study concluded that there was a significant relationship between poverty and participation of caregivers in community child wellbeing activities. Holding other factors constant, the study findings reflected that parents or caregivers from poor households were at a higher risk of not participating in community child wellbeing activities compared to their counterparts from rich households.

5. RECOMMENDATION

The study recommends the need for interventions aimed at alleviation of extreme poverty. Such interventions may include but not limited to: increasing access to education, supporting poor households through cash transfer programmes, adoption of disaster risk reduction strategies in pastoral economies and women economic empowerment.

CONSENT

The study was undertaken in strict conformance to safety, confidentiality and strong research ethics. Consent procedures were followed during the study, with written consent obtained from the respondents. Only after consent was given, did the study interview and/or discussions proceed. The research assistants informed the study participants that their participation was voluntary and that the respondents were free to refuse to answer any question or withdraw altogether, whenever they felt to. They were also informed that there was no monetary compensation for participating in the study. All the information collected through the study was treated with utmost confidentiality based on the principle of (do-no-harm).

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COMPETING INTERESTS

Authors have declared that they have no known competing financial interests or non-financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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